AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application.

Claim 1-49 (cancelled)

Claim 50 (previously presented): A method of identifying a compound which modulates binding of a ligand to an IGF-1 receptor comprising:

(A) designing or screening for a compound which binds to the structure formed by amino acids 1-462 having the atomic coordinates as shown in Figure 1, where binding of the compound to the structure is favored energetically, and

(B) testing the compound designed or screened for in (A) for its ability to modulate binding of the ligand to the IGF-1 receptor in vivo or in vitro, thereby identifying a compound that modulates binding to the IGF-1 receptor.

Claim 51 (previously presented): The method according to claim 50, wherein the testing in step (B) is performed by a high-throughput assay.

Claim 52 (previously presented): The method according to claim 50, wherein the testing in step (B) comprises testing the compound for the ability to modulate IGF-1 receptor mediated cell proliferation.

Claim 53 (canceled).

Claim 54 (previously presented): The method according to claim 50 in which the compound is identified from test compounds in a database.

Claim 55 (previously presented): The method according to claim 50, wherein step (B) comprises testing the compound for its ability to increase signal transduction by binding to the IGF-1 receptor.

Claim 56 (previously presented): The method according to claim 50, wherein step (B) comprises testing the compound for its ability to decrease signal transduction by binding to the IGF-1 receptor.

Claim 57 (previously presented): The method according to claim 50, wherein step (B) comprises testing the compound for its ability to inhibit or prevent the binding of a ligand to the IGF-1 receptor.

Claim 58 (previously presented): A method of selecting a compound which binds to the IGF-1 receptor comprising:

(A) designing or screening for a compound which binds to the structure formed by amino acids 1-462 having the atomic coordinates as shown in Figure 1, where binding of the compound to the structure is favored energetically, and

(B) selecting a compound designed or screened for in (A) which has an experimentally determined K_d or K_I of less than 10^{-6} M for the IGF-1 receptor, thereby selecting a compound which binds to the IGF-1 receptor.

Claim 59 (previously presented): The method according to claim 58, wherein the K_d is less than 10^{-8} M.

Claim 60 (previously presented): The method according to claim 58, wherein the K_I is less than 10^{-8} M.